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Method for complex web applications design

Valiev R., Galiullin L., Dmitrieva I., Ilyukhin A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Research India Publications. This article deals with peculiarities of design that are taken into consideration during practical development of complex information systems, made on the basis of web technologies, in particular during development of web applications. This article covers the majority of development aspects from the position of different methodologies of web applications design and lists design peculiarities differences in comparison with programme means that do not use web technologies. Web application architecture design according to block and modular principle is suggested. The main programme block will be responsible for users' authorization, session provision, request of enclosed modules, connection to database and similar service functions. Administrative module will allow managing sets of modules, features of web applications, change informational content. It is also suggested that services of web application are designed according to modular principle as the ones that have their own managing modules and modules of data processing (working modules). Peculiarity of the suggested methodology is that the modules are made in the form of separate files that execute their own specific function and work strictly with their own tables in database. It is suggested to use traditional approach when creating a web application. It is connected with presence of a big number of different relational database control systems supported by web servers. Initially on the stage of database design datalogical models are being developed. They are oriented on data storage and processing environment. The difference of the suggested graphic interface is that navigation in the web application is managed by the user who may execute previously permitted actions on random following his way in navigating the interface. The method described in the article is used in web applications development for automated informational systems of diesel engines trials.

Keywords

And web interface, Client-server technology, Heterogeneous data storages, Informational architecture, Scripting languages, Structural design, Web applications, Web programming